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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/042,442	01/08/2002	Janet M. Carver	1921A	5632
35157	7590	02/02/2004		
NATIONAL STARCH AND CHEMICAL COMPANY				
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			EXAMINER	
			BHAT, NINA NMN	
			ART UNIT	PAPER NUMBER
			1761	

DATE MAILED: 02/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/042,442

Applicant(s)

CARVER ET AL.

Examiner

N. Bhat

Art Unit

1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. Claims 13-17 and 22 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 13, it is unclear what applicant means by "co-processed composition of claim 1 wherein the hot temperature process tolerance is characterized by and an ability of a conventional brown or tomato sauce containing the co-process composition to have less than a 20% drop in viscosity...." this characteristic does not further limit the composition of claim 1. Applicant should draft the claim using clear, positive, meaningful language. For example, Applicant could recite "A brown or tomato sauce comprising the co-processed composition of claim 1 wherein the brown sauce or tomato sauce has a peak viscosity etc...." Suitable correction is required in claims depending from claim 13. Similarly in claim 22, wherein applicant recites that the brown sauce emulsification is maintained for 24 hours after cooking does not further limit claim 1, applicant should claim the brown sauce comprising the co-processed composition of claim 1 and then recite that that the sauce remains emulsified for 24 hours. Correction is required.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3-5, 8, 11-12, 19-21, 23 and 25-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Higgins et al.[USP 5,849,351]

Higgins et al. teach a modified cornstarch and rice flour co-processed composition in a ratio of 10:1 to 1:1, which can be used as a coating or batter. The modified starch is a cornstarch, which has been commercially modified by known cross-linking and chemical substitution process such as to product acid hydrolyzed, phosphate modified and hydroxyalkylsubstituted starches. When using the co processed starch and flour in a coating composition the coating is not detectable and provides a clear coating. [Note Column 4, lines 10-65]. With respect to applicant's limitations regarding opacity, and viscosity these properties would be inherent properties of the co-processed starch and flour as described by Higgins '351. With respect to applicant's process claims of using the co-processed starch and flour composition as a thickener or batter this has been fully taught by Higgins. Applicant is further reminded that it has been well established by the Courts that a new use for an old composition is not patentable.[Note the case law of *In re Thuauu*]

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
6. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higgins et al.[5,849,351].

Higgins et al. teach providing a co-processed starch and flour composition, the co-processed starch and flour would inherently provide thickening, opacity, process tolerance, cold and hot temperature stability, emulsification and instant viscosity properties in food.

Higgins et al. teach that any commercially available modified starch can be used. The modified starch is modified by known process such as cross-linking and chemical substitution process to product acid hydrolyzed phosphate modified and hydroxyalkylsubstituted starched. To use a waxy maize plant that is heterozygous for the sugary-2-allele or plant of a wxsu2 (homozygous) genotype, and translocations, inversion, mutants and variations thereof would have been obvious because it has been well recognized by modified starch producers which plant types produce the best type of waxy maize starch and to select plant varieties which provide the best starch characteristics would have been obvious to one having ordinary skill in the art at the time the invention was made.

7. Claims 13-18 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higgins et al.['351] in combination with Thomas et al.

Higgins '351 teach a co-processed modified starch and flour composition. The starch and flour composition is used as an aqueous coating or can be used in a batter.

Higgins'351 does not per se teach that the co-processed modified starch and flour can be used as thickener in foods such as brown sauces and tomato based sauces. As discussed above, the co-processed modified starch and flour would inherently provided thickening properties and therefore can be used in foods or products requiring a thickener.

Thomas et al. teaches foods, which contain thermally inhibited starches and flours, which are used as thickeners. Thomas et al. teach that foods containing the thermally inhibited starches and flours can be used in food products such as fruit based pie fillings, baby foods, tomato based product such as gravies, sauces, soups, stove top cooked foods, puddings pourable and spoonable salad dressings, refrigerated food such as dairy and imitation foods, frozen foods, etc.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a co-processed starch and flour composition of Higgins'351 which is used as a thickener in foods as taught by Thomas et al. because the co-processed starch and flour has been used as a coating and batter for food which has been taught in Higgins'351, Thomas et al. teaches that thermally inhibited starches and flours are used as thickeners and viscosifiers in foods such as sauces, gravies, salad dressings , refrigerated and frozen foods as well as used in batters and coatings for foods thus providing an equivalent function for using starches and flours in foods thus to use the co-processed modified starch and flour in foods such as tomato based sauces and brown sauces/gravies renders applicant's invention as a whole obvious to one of ordinary skill in the art.

8. Claims 9, 10 and 24 are free of the prior art as the prior art does not teach a co-processed modified starch and wheat flour having applicant's specified protein content as claimed.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Higgins et al. '607 teach water dispersible coating compositions comprising a blend of modified cornstarch and rice flour. Chiu et al. '121, 675 and '017 teach thermally inhibited non-pregelatinized granular starches and flours and the process for its preparation. Warzburg et al. teach a stack thickener made from a modified waxy starch of the wxsu 2 genotype. Jewell et al. teach a process for producing a fat substitute bakery dough. Zallie et al. teaches a method of making foods containing soluble high amylose starch.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to N. Bhat whose telephone number is 571-272-1397. The examiner can normally be reached on Monday-Friday, 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-0987.



N. Bhat
Primary Examiner
Art Unit 1761